DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 4, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP4-13285 in view of Kinugawa, US PGPub 2004/0079309.

JP4-13285 disclose an industrial robot comprising a first member (4d') and a second member (22); the first member (4d') including: a surface/mounting portion (bottom of cavity), a first positioning member (42f) which protrudes in a direction parallel to an axis of relative rotation (parallel to 20) of the first and second members, a first mount portion (43f) where the first position member (42f) is embedded, a first guide portion (walls of the hole within 4d' for the pin) along which the first positioning member (42f) slides in such a manner as to protrude; and the second member (22) disposed on a side of the surface (bottom of cavity) of the first member (4d') including: an abutment portion (22a) which is brought into abutment with the first positioning member (42f) when the first and second members rotate relatively; wherein the first positioning member (42f) and the first guide portion (hole) adopt a socket and spigot construction and where the first positioning member (14') is held at a position where the first positioning member (14') does not protrude from the first member (4d') when performing

a normal operation, whereas only when performing an origin adjustment the first position member is made to protrude.

JP4-13285 does not disclose that the first positioning member is retracted within the surface of the first member so that the first positioning member is held at a position where no portion of the first positioning member protrudes.

Kinugawa teaches an origin adjustment device which comprises a first positioning member (91) which is retracted within a surface of a first member (80) so that the first positioning member is held at a position where no portion of the first positioning member protrudes (see Figure 11).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify JP4-13285 and provide for the first positioning member to be retracted within the surface of the first member so that the first positioning member is held at a position where no portion of the first positioning member protrudes. Rearranging the first positioning members of JP4-13285 within the first member, as taught by Kinugawa, would yield the predictable result of reducing the chance of incidental contact between the first positioning member and the abutment which results in a safer device which can also be assembled quickly since a clearance between the first positioning member and the abutment would not have to be set and checked.

Claims 1, 4, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP4-13285 in view of Miyasaka, USP 6,394,052.

JP4-13285 disclose an industrial robot comprising a first member (4d') and a second member (22); the first member (4d') including: a surface/mounting portion (bottom of cavity), a first positioning member (42f) which protrudes in a direction parallel to an axis of relative rotation (parallel to 20) of the first and second members, a first mount portion (43f) where the first position member (42f) is embedded, a first guide portion (walls of the hole within 4d' for the pin) along which the first positioning member (42f) slides in such a manner as to protrude; and the second member (22) disposed on a side of the surface (bottom of cavity) of the first member (4d') including: an abutment portion (22a) which is brought into abutment with the first positioning member (42f) when the first and second members rotate relatively; wherein the first positioning member (42f) and the first guide portion (hole) adopt a socket and spigot construction and where the first positioning member (14') is held at a position where the first positioning member (14') does not protrude from the first member (4d') when performing a normal operation, whereas only when performing an origin adjustment the first position member is made to protrude.

JP4-13285 does not disclose that the first positioning member is retracted within the surface of the first member so that the first positioning member is held at a position where no portion of the first positioning member protrudes.

Miyasaka teaches an origin adjustment device which comprises a first positioning member (37) which is retracted within a surface of a first member (15) so that the first positioning member is held at a position where no portion of the first positioning member protrudes (see Figure 6).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify JP4-13285 and provide for the first positioning member to be retracted within the surface of the first member so that the first positioning member is held at a position where no portion of the first positioning member protrudes. Rearranging the first positioning members of JP4-13285 within the first member, as taught by Miyasaka, would yield the predictable result of reducing the chance of incidental contact between the first positioning member and the abutment which results in a safer device which can also be assembled quickly since a clearance between the first positioning member and the abutment would not have to be set and checked.

Response to Arguments

Applicant's arguments filed March 9, 2010 have been fully considered but they are not persuasive.

In response to applicant's argument that Kinugawa and Miyasaka are nonanalogous to JP'285, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Applicant's invention is concerned with a mechanism for preventing rotation of one component relative to another. Both Kinugawa and Miyasaka are pertinent to the particular problem in which the Applicant is concerned since both Kinugawa and Miyasaka disclose a locking mechanism which prevents rotation of one member relative to another where the locking mechanism is

completely recessed in one of the members when the lock is not in use. Modifying the locks of JP'285 to be recessed within one of the members when not in use would indeed be obvious to one of ordinary skill in the art in view of the discloses of both Kinugawa and Miyasaka.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES PILKINGTON whose telephone number is (571)272-5052. The examiner can normally be reached on Monday - Friday 7-3.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on (571)272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JAMES PILKINGTON/
Examiner, Art Unit 3656
4/6/2010

/Thomas R. Hannon/
Primary Examiner, Art Unit 3656